

CLAIMS

1. A process for producing a plurality of components, comprising the steps of:
joining a first surface of a substrate to a first surface of a carrier with a bonding force;
machining the plurality of components out of the substrate, with the plurality of components being held together by the carrier at least immediately after they have been machined out;
releasing the bonding force between the carrier and the plurality of substrates;
and
detaching the plurality of components from the carrier in order to separate the plurality of components.
2. The process as claimed in claim 1, wherein the plurality of components are separated from one another laterally during the machining step.
3. The process as claimed in claim 1, wherein the substrate comprises glass or a vitreous material.
4. The process as claimed in claim 1, wherein the carrier comprises a carrier film.
5. The process as claimed in claim 1, wherein the step of machining comprises removing material from a second surface of the substrate, the second surface being on the opposite side of the substrate from the first surface, the material removed being at least as far as the first surface of the substrate.
6. The process as claimed in claim 5, the step of machining further comprises removing a portion of material from the first surface of the carrier.

7. The process as claimed in claim 1, wherein the step of machining comprises removing portions of the substrate and the carrier in succession until a position between the first surface and a second surface of the carrier material is reached, the second surface being on the opposite side of the substrate from the first surface.
8. The process as claimed in claim 1, wherein the step of machining comprises machining a multiplicity of laterally adjacent components out of the substrate in one working step.
9. The process as claimed in claim 1, wherein the step of machining comprises vibratory lapping.
10. The process as claimed in claim 9, wherein the vibratory lapping step comprises using a plurality of hollow lapping punches.
11. The process as claimed in claim 10, wherein the plurality of hollow lapping punches have a cross section in the form of a continuous ring.
12. The process as claimed in claim 1, wherein the step of machining comprises blasting with a blasting material.
13. The process as claimed in claim 1, wherein the substrate has a second surface opposite the first surface, the second surface being a structured surface.
14. The process as claimed in claim 1, wherein the detaching step comprises using a vacuum to separate the plurality of components from the carrier.
15. The process as claimed in claim 1, further comprising applying a solder agent to at least a portion of a second surface of the substrate, the second surface of the substrate being on the opposite side of the substrate from the first surface.
16. The process as claimed in claim 15, wherein the applying step comprises printing the solder agent on the portion of the second surface of the substrate in structured form as a solder-agent layer.

17. The process as claimed in claim 15, further comprising applying a protective layer to the second surface of the substrate and/or to the solder-agent layer.
18. The process as claimed in claim 17, further comprising removing the protective layer after the machining step and before the detaching step.
19. A process for producing a plurality of components, comprising the steps of:
 - joining a carrier to a first surface of a substrate with a bonding force;
 - applying a solder-agent layer to a second surface of the substrate, the second surface being on the opposite side of the substrate from the first surface;
 - applying a protective layer to the second surface and to the solder-agent layer;
 - machining the plurality of components out of the substrate by removing material all the way through the protective layer and the substrate and by removing material only part way into the carrier;
 - removing the protective layer;
 - releasing the bonding force; and
 - detaching the plurality of components from the carrier.
20. An intermediate product in the form of a layer composite, comprising:
 - a substrate divided into a multiplicity of laterally separated components; and
 - a common sheet-like carrier having a first surface of each of the multiplicity of laterally separated components being releasably secured laterally adjacent to one another on the common sheet-like carrier.
21. The intermediate product as claimed in claim 20, further comprising a solder-agent layer on a second surface of the substrate, the solder-agent layer being divided into a multiplicity of laterally separate portions, and each of the multiplicity of laterally separate portions being assigned to a specific one of the multiplicity of laterally separated components.
22. The intermediate product as claimed in claim 21, wherein the solder-agent layer has a structured form.

23. The intermediate product as claimed in claim 21, further comprising a protective layer on the second surface of the substrate and the solder-agent layer.

24. The intermediate product as claimed in claim 20, further comprising a protective layer on a second surface of the substrate.

25. The intermediate product as claimed in claim 24, wherein the protective layer is divided into a multiplicity of separate portions, and each of the multiplicity of laterally separate portions being assigned to a specific one of the multiplicity of laterally separated components.